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5 **INSTALLATION OF INTELLIGENT SENSORS FOR THE HIGH-SPEED
 ACQUISITION OF DATA VIA AN ETHERNET NETWORK**

ABSTRACT

10 The invention concerns an installation for the high-speed
acquisition of acquisition data via an Ethernet network (2)
with several nodes (N), where at least one of the nodes of the
Ethernet network constitutes a client/server detection unit
(3) with at least one detector (4) delivering acquisition
data.

15 According to the invention each detection unit (3)
includes :

- self-triggering resources for reading the acquisition data
so that the said detection unit (3) is able to operate
independently,
- 20 - reading and processing resources that are independent of the
other nodes,
- resources for transmission of the acquisition data via the
network (2), to at least one other node (N).
- and a clock unit allowing correlation between the clocks of
25 the detection units, where each clock unit has resources for
receiving a clock synchronisation signal, resources for
transmission to the transmitting clock unit, and resources
for processing the encoded instructions.

30 (Figure to be published: **figure 1**)